APPROVED BY TRANSPORTATION COMMISSION ON APRIL 20, 2017

APPROVED
SUMMARIZED MINUTES

CITY OF SCOTTSDALE
TRANSPORTATION COMMISSION
REGULAR MEETING

THURSDAY, MARCH 16, 2017

KIVA – CITY HALL
3939 N. DRINKWATER BOULEVARD
SCOTTSDALE, AZ 85251

1. CALL TO ORDER

Chair Holley called the regular meeting of the Scottsdale Transportation Commission to order at 6:04 p.m. He welcomed new Commissioner Pamela Iacovo.

2. ROLL CALL

PRESENT: Paul Holley, Chair
Gary Bretz, Vice Chair
Barry Graham, Commissioner
Pamela Iacovo, Commissioner
Jyme Sue McLaren, Commissioner

ABSENT: Steven Rosenberg, Commissioner
Robert Stickles, Commissioner

STAFF: Paul Basha, Transportation Director
Susan Conklu, Senior Transportation Planner

3. PUBLIC COMMENT

No members of the public wished to address the Commission.

4. APPROVAL OF MEETING MINUTES

- Study Session of the Transportation Commission – February 16, 2017
- Regular Meeting of the Transportation Commission – February 16, 2017

One grammatical correction was made.

VICE CHAIR BRETZ MOVED TO APPROVE THE STUDY SESSION MINUTES OF FEBRUARY 16, 2017 AND THE REGULAR MEETING MINUTES OF FEBRUARY 16, 2017 AS AMENDED. COMMISSIONER GRAHAM SECONDED. THE MOTION CARRIED BY A VOTE OF FIVE (5) TO ZERO (0). COMMISSIONERS ROSENBERG AND STICKLES WERE ABSENT.

5. WAYFINDING

Susan Conklu, Senior Transportation Planner stated that in the 2008 Transportation Master Plan, the Bicycle Element included recommendations for wayfinding signage for paths and trails. The project began in 2011. Test signage was installed in June, 2013. It was fabricated in-house and mapped using ASU interns and Transportation staff for decisions on where the signs would go and what they would say. Based on feedback from this process, extensive updates have been made via the Paths & Trails Subcommittee, Transportation Commission and the Parks and Recreation Commission. There has been consistent feedback that the signage should appear more customized and have a better design.

The City hired a consultant to develop a design plan. In January 2015, the consultant began to collect field data and look at existing conditions. Due to the size, scope and budget, it was decided that the initial focus would be on the Indian Bend Wash path from McKellips Road to Indian Bend Road. In the future, the focus would include the remaining paths in the City, including the Cross-Cut Canal and Arizona Canal paths. It was found that there was no consistent signage system. The final design plan included color coding, based on the main logo. Blue would be for anything along a canal, brown on unpaved trails and green on other paths, such as Indian Bend Wash. The signs have space at the bottom of each for different logos, including the City seal and other regional designations.

Over the past year, prototypes were made available for comments and input. They were located at multiple events and meetings as well as the atrium of One Civic Center for most of the year. There were a number of positive comments on the quality and effectiveness of the signs. Suggestions included adding kilometer designations as well as cautions for riders to stay to the right on the path and to give signals when passing. Feedback was also received on the appearance of the maps. There was consistent input regarding integrating technology and online maps on the large signs.

In June, 2016, an update was provided to the Transportation Commission. Comments focused on the color combinations for the signage. It was suggested that a web link would be helpful on the signs. There were questions regarding the costs to implement signs City-wide outside of the plan area.

Staff is currently reviewing final sign locations, types and graphic standards and specifications to be given to a contractor for fabrication. In addition, they are gathering cost estimates for installation from McKellips to Indian Bend Road. The first phase may begin this fiscal year or the next, depending on the cost parameters.

Commissioner thanked Ms. Conklu for the presentation. He noted that signs are planned in the trails area providing directions to Old Town and asked whether signs would be present in Old Town with directions to Indian Bend Wash or the Canal area. Ms. Conklu said that signs will be

present if the location is near a path, however there is flexibility to add signs later. Feedback from the public is anticipated once signs are installed.
Commissioner asked what material the signs are made of and what the maintenance program entails. Ms. Conklu said she would have to double-check on the material. The goal is to use a material that will not fade. For maintenance, the plan should ensure ongoing maintenance and replacement as needed.

Paul Basha, Transportation Director stated that the sign material used for the bicycle path is identical to the sign material used in lesser forms of transportation on streets. Commissioner asked whether the material has retro-reflectivity. Mr. Basha said he would need to investigate this further.

Commissioner commented on the importance of color. The goal is to make entry and access to wayfinding signage as easy as possible for the user. When there are multiple colors used, most users will not understand the differences between a blue, brown or green sign. The issue of confusion represents a barrier to use.

Commissioner asked whether there are problems with graffiti on signage and whether the new signs have any features to mitigate the problem. Ms. Conklu said that she would have to look into the data on graffiti stats. To her understanding, the signs will have a coating that makes cleaning easier. She also noted the issue of particular signs being stolen. Mr. Basha said that the sign material is very resistant to both markers and scratching, resulting in a minimal graffiti problem with the signage.

Chair inquired as to the timeline for having the signs made and installed. Ms. Conklu stated that depending on cost estimates expected shortly from the contractor, the signs will be fabricated outside of the City's signage shop and installed by the contractor. The cost estimates will provide guidance on whether the project will be completed as a whole or broken into smaller sets. The process is that the job goes out to bid in order to receive proposals from multiple contractors, or in the alternative, the job may be performed by one of the City's existing on-call contractors. Mr. Basha estimated the process to take from one to four months.

6. SEPARATED BICYCLE LANES

Ms. Conklu stated that separated bicycle lanes are sometimes called cycle tracks, protected bike lanes or buffered bike lanes. They differ from traditional bicycle lanes in that riders are separated from vehicular traffic and sidewalks, either by wider striping areas or vertical devices. They may function as either one-way or two-way bike lanes. Separated bicycle lanes are not in the Manual on Uniform Traffic Control Devices, however they are included in the National Association of City Transportation Officials (NACTO) Guide, in the Urban Bikeway Design Guide as well as the Urban Street Design Guide. Separated bicycle lanes emerged across the United States in 2011, when PeopleForBikes launched the Green Lane Project. After this time, the number of separated bike lanes quadrupled. To date, over 387 separated bicycle lane projects have been constructed in 105 cities across the country. Many are located on low stress bike networks.

Examples of bicycle separation methods include:

- Striped buffer
- Delineator posts
- Bollards
- Concrete barriers
- Raised medians
- Raised lanes
- Bumps
- Planters
- Parking stops
- Parked cars
- Combination of treatments

The League of American Bicyclists recommends separated bike lanes to attract all types of bicyclists, including families and less experienced cyclists. When Scottsdale's Bicycle Friendly Community status was re-evaluated in 2015, the League of American Bicyclists made the following recommendations:

- Adopt bicycle facility selection criteria that increases separation and protection of bicyclists based on motor vehicle speed and volume
- Continue to expand and improve the bike network through the use of different types of bicycle facilities
- On roads where vehicular speeds exceed 35 mph, it is recommended to provide protected bicycle infrastructure such as protected bike lanes, buffered bike lanes, or parallel 10-foot shared use paths

Funding costs for installing separated bike lanes can range greatly from $50,000 to $500,000 per mile. Design considerations include:

- Intersections, potential conflicts and turning movements
- Driveways
- Transit stops
- Accessible parking
- Loading zones
- Stormwater drainage
- Maintenance, such as sweeping
- Data and safety

Local examples of separated bike lanes are located in Tempe along Priest Drive, Broadway Road, Hardy Drive and McClintock Drive as well as several locations in Phoenix. In Scottsdale, an example is the location of 96th Street from Thunderbird to Redfield.

The Paths & Trails Subcommittee received an update on the separated bike lanes in February. At that time, a Commissioner commented that Scottsdale and Hayden Road could both benefit from this type of a project. However, he was concerned that if there is not sufficient space, a travel lane would have to be reduced, potentially leading to increased congestion and collisions. Any future projects would include evaluation of crash data on similar types of projects and roadways with comparison of various reoccurring factors. Another consideration is level of

crash severity. There may be a higher number of crashes, however, they are less severe. Other data for analysis would include bicycle counts before and after construction.

In Scottsdale, there are considerations for removal of a third travel lane on Drinkwater and Goldwater Boulevards in order to add a separated bike lane. These ideas are conceptual at this point. Feedback is welcome. This could provide a loop around downtown as well as connectivity to east/west routes and bike lanes that cross Scottsdale Road.

Commissioner commended the idea of the facilities being explored as part of Scottsdale's bus network. One would have to be a brave bicyclist in the community to venture onto an arterial street, which simply has four feet of payment and street stripe. The high volumes of traffic speeds create a dangerous condition for cyclists. A grade delineation between the lane serves many purposes, one of which is to indicate cyclist use. This will encourage strolling pedestrians to stay clear of the lane. Some discussion would be helpful in terms of acquiring traffic volume counts. In addition, greater dialogue with the biking community would be helpful.

Vice Chair asked about the methods for obtaining bicycle counts. Ms. Conklu explained that there are multiple methods for obtaining this data. Technology for measuring bicycle traffic has improved greatly. Some bicycle counting methods can be used on lanes and paths. Scottsdale does not yet have a substantial data collecting program, but has been slowly collecting information. For the past few years, there has been a regional bike count program funded by MAG. This has occurred in Scottsdale in three locations. Automated counters provide a big picture of times of day and week in which traffic occurs. Tempe Bicycle Action Group does volunteer bike counts each spring. Traffic cameras have been used in a limited capacity on Indian Bend Wash south of Indian School. Vice Chair commented that it would be helpful to obtain counts on 96th Street, the location of the two-way travel.

Vice Chair asked how bus stops are handled in separated bicycle lanes. Ms. Conklu said this is a design aspect which must be well considered during engineering and design. A separated bike lane between the sidewalk and the street represents a barrier to loading and unloading bus passengers.

Vice Chair referred to the area of McClintock with the reduced lane and asked whether there has been resultant congestion. Ms. Conklu acknowledged that the answer, "depends on who you ask." She lives on McClintock and the longest average delay during peak time was a nine-minute difference.

Vice Chair addressed the method that includes a raise median scenario and parked cars as a separation tool. This has the potential to cause significant problems for the visually impaired. The raised median is very much the same color as the other areas, which would be a visual challenge. Ms. Conklu acknowledged the need for greater color contrast.

Chair recommended a demonstration along one of the suggested corridors, including perhaps Drinkwater or Goldwater. Ms. Conklu said that this is being contemplated in the Downtown area, because comments are being received that bicycles are everywhere in the area, parked randomly both day and night. A system to increase the comfort level for all types of bicycle riders would be beneficial. In the summertime, MAG has opportunities for grant assistance, which helps with the process up to the concept phase. This could be a possible submission idea for coming up with a design concept. There would be no cost to the City, as the grant would be financed by MAG.

Chair asked whether either Drinkwater or Goldwater might present more problems than the other. Ms. Conklu said that the focus would be on three-lane segments as opposed to two-lane segments.

7. 2014 AND 2035 VOLUME-TO-CAPACITY

Mr. Basha reviewed the list of arterial streets and collector streets that are over or near capacity or under capacity. Arterial streets are mile and half mile streets, such as Scottsdale, Hayden, Shea and Cactus. Traffic volumes near or over capacity (25 percent of arterials currently) lead to congestion.

Mr. Basha said that the sweet spot for arterials is between 50 and 80 percent of capacity. Over or near capacity is the situation in which there are too many cars present for the travel lanes provided. Less than 50 percent of capacity is also undesirable, as this means there is too much land and too many resources devoted to a street relative to the number of cars present. Just under one-third of the City's streets are less than 50 percent of capacity.

Collector streets tend to be the quarter-mile streets and some half-mile streets. Collectors are only one lane per direction. Only eight percent of collector streets are over or near capacity. As collector streets have only one lane per direction, it is not an issue of concern that 74 percent of collector streets are less than 50 percent of capacity. Collector streets connect residential streets to arterial streets. Arterial streets are used to complete the traveler's trip or to travel to a freeway.

Mr. Basha referenced the map depicting the area of the City north of Pinnacle Peak Road with current traffic volumes. Mr. Basha said that in this part of the City, 11 streets are under capacity, five are between 50 to 80 percent, five are between 80 percent and capacity and two are over capacity. The next slide depicted the same area of the City, however with an illustration of 2035 traffic volumes. The projection assumed the completion of the Capital Improvement Program between now and 2035. In 2035, there are no street segments under 50 percent of capacity. There is elimination of the 80 percent to capacity category. Only four segments are over capacity. All others are between 50 and 80 percent of capacity.

For the central part of the City (Indian Bend Road to Pinnacle Peak Road), many streets are less than 50 percent of capacity and many are between 50 and 80 percent of capacity. A number of streets are between 80 percent of capacity and capacity. Three streets are currently over capacity. In 2035, only four to five segments are less than 50 percent of capacity. Most are between 50 and 80 percent of capacity, and 10 to 20 are over capacity. Over capacity streets are located in the vicinity where the 101 bends from running north/south to running east/west. They are also in the Shea corridor east of the freeway and west of the Central Arizona Project Canal.

In the southern part of the City south of Indian Bend Road, a number of street segments are currently less than 50 percent of capacity. A number are between 50 and 80 percent of capacity. A handful are between 80 percent and capacity. Two streets are over capacity. These include Indian School Road between the freeway and Downtown Scottsdale and one segment of Chaparral Road that is one lane per direction.
In 2035, there are no streets with less than half of capacity. North/south streets are between 50 and 80 percent of capacity. This is as a result of the Pima Freeway. Much of the north/south traffic is on the freeway and not on north/south City streets. There is one exception. Between

McDonald Drive and Indian Bend Road there are only three north/south streets: Scottsdale Road, Hayden and Pima, which are over capacity in 2035. Just south of McDonald Drive, Granite Reef Road provides enough relief to keep the segment between McDonald and Chaparral between 50 and 80 percent of capacity. East/west streets are over capacity, also due to the freeway. While the freeway is beneficial for transporting vehicles north and south, City streets are required to access the freeway. The freeway has increased traffic volume on east/west streets.

Vice Chair asked about the capacity of the freeways in 2035. Mr. Basha said that the freeways are expected to become very congested. The Arizona Department of Transportation has advised the City that it will not provide additional lanes on the Pima Freeway between Shea and McKellips.

Commissioner thanked Mr. Basha for the presentation, noting the trends are not dissimilar to what most American cities experience as they grow. This is a good opportunity for the community to begin to change the dialogue about carrying capacity. The focus should not only be on vehicular capacity, but people capacity. Questions include how to build infrastructure that allows the City to carry more people with the resources at hand, such as bike lanes discussed earlier this evening.

Commissioner asked whether seasonal travel, snowbirds and spring training volumes are included in the reports. Mr. Basha said that all the data is seasonally adjusted. The volumes presented are generally speaking reflective of May/April and October/November time frames.

Commissioner asked whether projections are derived from percentage population growth trailing and/or substantial amounts of development occurring in the City. Mr. Basha said that the 2035 projections come from MAG. They include population increase as well as other changes in land use in the next 20 years. It is based on currently approved zoning. MAG subdivides the entire Metropolitan area into traffic assignment zones. Scottsdale subdivides the zones even further.

Chair asked whether this information could be made available online. Mr. Basha said that because of this Commission meeting, the information is accessible via internet.

Vice Chair commented on Pima Road, stating that he suspects it will be constructed with at least two lanes in each direction. If the freeway is backed up, it is likely that this segment of Pima Road will be over capacity as well. Mr. Basha agreed that when the freeway becomes congested, the surface streets must accommodate the traffic. The projections include increases in traffic on the freeway.

Mr. Basha discussed the highest congested street segments in the City. Three street segments are over 115 percent of capacity. Four are between 115 and 110. At least three are just slightly over capacity. Four of the top ten congested street segments in the City are on Indian School Road between Downtown Scottsdale and the 101 Freeway. Approximately ten to 12 years ago, improvements were made to Indian School Road between Downtown Scottsdale and the freeway. There was extensive discussion as to whether the improvement should be six lanes (three lanes per direction) or four lanes (two lanes per direction). Because of intense pressure, City Council selected the four-lane project, rejecting the recommendation to have three lanes per direction. In hindsight, this was a poor decision. Within the next 11 street segments, six are just over 100 percent of capacity, while five are just under 100 percent of capacity.

For the volume capacity ratios for the part of the City north of Cactus Road, the areas with 50 percent or less of capacity represents a poor use of resources. There is too much land, asphalt, maintenance and electricity for signals for the volumes present. In the next 20 years, there will be few street segments that are less than 50 percent of capacity. Over 60 percent of the street segments at Cactus Road and north are in the sweet spot of 50 to 80 percent of capacity. This assumes that the City will complete the five-year and 20-year capital improvement program currently in consideration. There is minimal change in the percentage of streets north of Cactus Road that are 80 percent of capacity to over capacity.

In the 20 year plan with MAG, the City has a large number of projects that are scheduled for construction between the years 2021 and 2026. The City is scheduled to receive $179 million for these projects from federal and regional sources. In order to receive the funds, the City must contribute $82 million. The City currently has no mechanism to provide $82 million of funds. The last three bond elections for transportation funding were defeated.

If the funding cannot be found, streets north of Cactus Road will be at 60 percent near capacity or over capacity in 20 years. The population of the City is projected to increase much greater than the projected increase in lane miles. Without funding, the area south of Cactus Road will have no major streets at less than half of capacity 20 years from now. Seventy-five percent of streets will be between 50 and 80 percent of capacity. Twenty-five percent will be near or over capacity.

Pima Road is the only location south of Cactus Road where the City plans to provide additional lanes. The City cannot rely on street construction to accommodate future increases in population and development. Instead it needs to provide alternatives, other modes of travel and compatible land uses. Statistics reveal that 70 percent of the people who live in Scottsdale work somewhere else. Eighty-three percent of the people who work in Scottsdale live somewhere else.

Vice Chair commented that this makes the need for high capacity transit evident. City Council members have talked about self-driving cars as a solution to public transit needs. However, if there is no capacity on the roads, this is not a solution. Mr. Basha said he is typically presented with the same argument. However, most of the transportation profession does not believe this is a solution. Most cars in the United States are parked for 23 hours of the day. With Uber, Lyft and driverless cars, there will be more vehicles on the streets in the future than there are today.

Mr. Basha discussed a slide which compared the number of people per street mile. There are currently approximately 500 people for every one mile of street north of Cactus Road. In the year 2025, it is predicted that all planned capital improvement program streets will be done. That is when the statistic is at its lowest in the future. In the year 2035, there will be 600 people per street mile north of Cactus.

South of Cactus, currently there are 300 people per mile of street. This will increase to approximately 400 people per mile of street. This discrepancy is largely due to the presence of Pima Freeway south of Cactus Road. In addition, the Southern part of the City is relatively dense. Farther north, houses are on larger properties.

Mr. Basha stated that on an annual basis, the Texas Transportation Institute determines the vehicle miles traveled on streets in 101 metropolitan areas throughout the country. They compute the daily vehicle miles traveled per person and per year. Prior to the construction of the 101 in Scottsdale, the City was off the charts in terms of the number of vehicle miles traveled per person. With the construction of the 101 Freeway, arterial use dropped considerably.

However, the City is still at the high end of metropolitan areas throughout the country in terms of vehicle miles traveled per person.

As an entire City, Scottsdale is at between 15 and 20 vehicle miles traveled per person per day. North of Cactus Road, the number is at the high end. This does not change drastically into the year 2035. South of Cactus Road, the number decreases slightly over the next 20 years.

Commissioner referred to daily vehicle miles travelled. She commented that the indication that Scottsdale residents drive more because they like to drive is one interpretation. Another interpretation would be that the City does not offer a wide selection of alternatives compared to Phoenix and other cities with robust transit systems. Mr. Basha agreed with the comments.

8. OTHER TRANSPORTATION PROJECTS AND PROGRAMS STATUS

Mr. Basha stated that the Department is in the process of planning, designing and constructing downtown pedestrian improvements. The City Council provided $2 million this year and $2 million for the next fiscal year for this purpose. The Commission directed staff to focus on Old Town Scottsdale. As such, there have been several meetings with merchants in the Old Town Scottsdale area. Last week, the City Manager received a letter from approximately six merchants in the Old Town area respectfully requesting that the Department not provide any Downtown pedestrian improvements in Old Town, Scottsdale. As such, improvements will be made in other parts of Downtown, other than Old Town Scottsdale.

Ms. Conklu said that April is Valley Bike Month. Events in Scottsdale will include Cycle the Arts on Sunday, April 9th. This includes registration beginning at 8:30 with riders leaving in small groups at 9:00 a.m. This will take place at Museum of the West. The route is not completely mapped out, however, it is typically kept at under ten miles, so that it is family-friendly and at a conversational pace.

April 19th is Bike to Work Day Valley-wide. In Scottsdale, if cyclists send a photo from their bike community to the Department, they can receive a Bike Month t-shirt from Valley Metro. At select Starbucks locations in Scottsdale, people can receive 20 percent off for riding their bikes that day. More information is available via sharetheride.com.

9. PUBLIC COMMENT

There were no public comments.

10. COMMISSION IDENTIFICATION OF FUTURE AGENDA ITEMS

There were no items discussed.

11. ADJOURNMENT

With no further business to conduct, Chair Holley adjourned the regular meeting at approximately 7:50 p.m.

SUBMITTED BY:

eScribers, LLC

***Note: These are summary action meeting minutes only. A complete copy of the audio/video recording is available at http://www.scottsdaleaz.gov/boards/transp.asp**